The Detox Strategy
Chapter One

How Toxic Are You? Take The Test

If you have been dealing with chronic illness, low energy, accelerated aging, or if you simply have had trouble losing unwanted fat, gaining mental clarity, and feeling the best and happiest you can, it's time for a change. And that change starts with an understanding of how toxic you are, where toxins come from, and what they potentially could be doing to you and your family from the inside out.

When you look around and admire the comforts of modern life, chances are you don't recognize that many of our prized possessions and the things that make our life a *lifestyle* may be harboring silent killers. From common household goods that clean our bodies and countertops to our furniture, clothing, garden hoses, bottled waters, and favorite foods we think are nourishing us, known and unknown poisons lurk everywhere—and in lots of hidden, unexpected places.

We face a daily onslaught of chemicals that our bodies are not equipped to protect against sufficiently, and it's not surprising that for the first time in human history—in our lifetimes—we are witnessing unprecedented levels of degenerative illnesses and disorders such as cancer and heart disease, as well as the emergence of "new" ailments such as chronic fatigue syndrome, autism, and fibromyalgia. People are diagnosed with diseases at younger ages, and our children are now contracting chronic illness at alarming rates. every day we seem to hear a study just published that links a health problem with a chemical or contaminant in our environment. even our venerable medical community has had to admit to mistakes made in the creation of drugs that can be more harmful and toxic to people than the disease or disorder they are intended to treat.

So widespread and invasive are man-made substances (synthetics) in our world that I'm sorry to report, being alive on planet earth today tags us all with a label: toxic—guaranteed! The question is, how toxic are *you*? That's what we are going to answer in this first chapter. In doing so, you will begin to see just how pervasive, and often unavoidable, health-damaging substances are in our everyday life. old theories about the effect they have on our bodies simply are not true: *The body can handle toxins—that's what the liver is for. The government will protect us from the really bad stuff. Increase sin cancer and chronic disease are the result of people living longer and better detection techniques*. Sound familiar? These are among the most commonly held myths today.

The good news: you can do something starting today to live better, longer, to prevent future health problems, or turn your health around if it's been at a low point. Yes, toxins do exist, but so do ways to combat them. The techniques I give are practical, simple, and economical. As I explained in the Introduction, this book is not meant to stir up paranoia or give you the impression that the state of our toxic world is beyond your individual control. on the contrary, my main goal is to share the secrets to living healthier in a toxic world that you can adopt in your lifestyle. I will alert you to the common toxins you are

most likely to encounter in your daily life and arm you with the knowledge to best avoid, limit, and manage their potentially harmful effects on your health, energy, and vitality. I will also show you how you can begin to change your environment through small-scale shifts, which can translate to large-scale transformations overall and revolutionize the quality of not only your life, but that of your children as well.

Even if you do just a fraction of the recommendations I offer, the benefits that await you could be tremendous. You will begin to think more clearly. You will feel sharper, stronger, and more alive. You may also notice physical changes in the mirror, from a better complexion to a smaller waistline. And you will likely sense that your body is simply happier. This is all in addition to the medical transformation that is taking place at the cellular level, where you stand a greater chance of combating disease and lowering your risk for future health problems. You may also find that you won't have to resort to or depend on drugs so much—both pharmaceutical and over-the-counter. With RENEW, you take a holistic approach to nurturing your body so it can continue to heal itself naturally no matter what it faces in day-to-day life.

YOUR BODY BURDEN

For decades scientists have been measuring the amount of industrial pollutants in air, water, and soil samples. relatively new, however, is a biomonitoring process designed to measure what some experts refer to as our "body burden," or the level of toxins found in tissues of the human body, which involves the analysis of blood, urine, umbilical cord blood, and breast milk. Toxins are stored in most every tissue in the body ranging from fat, to cardiac and skeletal muscle to bones, tendons, joints, and ligaments, to visceral organs, and to the brain.

Recently a series of comprehensive studies intended to illustrate the human body burden has been conducted through the collaborative efforts of two nonprofit health and environmental research organizations: Environmental Working Group (EWG), based in Washington, D.C., and Commonweal, based in California. Both strive to use the power of communal information to contribute to and protect public and environmental health.

In 2000 EWG and Commonweal began the Human Toxome Project (HTP) to analyze human tissues for industrial chemicals that enter the body as pollution via food, air, and water, or from exposures to ingredients in everyday consumer products. utilizing the latest technology, the project thus far includes a collection of seven studies involving 75 participants ranging in age from newborn to the elderly. of those people, all 75 tested positive for a combined total of 455 out of 528 chemicals, including pesticides linked to birth defects and developmental delays; heavy metals shown to cause brain and nervous system disorders; and dangerous PCBs (polychlorinated biphenyls) that have been banned in the united States since 1977 because of their damaging effects on the skin, blood, urine, and liver. (For summaries of these findings, please refer to page 269 in the Notes.)

I believe these studies are just the tip of the iceberg, and our understanding of the long-term effects of toxic exposure in our increasingly noxious environment will grow. The actual number of chemicals contributing to our body burden is likely much higher than those investigated by the project. Our ability to identify toxins in the body is limited by what we know

to look for, and how well we can find toxins based on current laboratory technology. Given the fact that many toxins hide deep in our tissues and tucked away in fat cells, I am prone to think we have much more to learn about this toxic library of possibilities. Uncovering how toxic exposure affects the human body is an emerging field of study that involves scientists, medical doctors, and engineers worldwide.

Also keep in mind that much of what we know about body burdens of contaminants comes from limited studies of a few contaminants, many of which are conducted by government agencies on selected groups of people. While these studies offer population-wide averages, they obviously cannot predict body burdens for individual people—and they cannot cover the gamut of all possible contaminants to which we are regularly exposed. Everyone reacts a little differently to chemicals, allergens, drugs, diseases, and external stimuli in general, which explains why the government's safety factors—including "safe" exposure limits for pollutants or contaminants in food and water—may not protect sensitive people.

Every citizen of an industrialized nation now carries an average of seven hundred synthetic chemicals in his or her body from food, water, and air—most of which have not been well studied.

WOMBS DO WOUND

Many experts once believed that the womb shielded the developing fetus from toxic exposure, but emerging evidence has proven otherwise. In actuality, the chemicals and pollutants to which the mother is exposed during her pregnancy are transferred from her bloodstream to that of her unborn child through the placenta. Not only has the Human Toxome Project demonstrated this when it found chemicals in cord blood and breast milk, but other studies also have proven that wombs are not safe havens from chemicals such as insecticides, pesticides, and heavy metals—some of the worst and most health-damaging toxins around. Toxic accumulation actually begins *before* birth. And it can last a lifetime.

Mercury, for example, is stored in the cardiac muscle in amounts 22,000 times greater than in skeletal muscle. during the aging process, as we experience low-grade inflammation and lose muscle mass, mercury (and other toxins) will get released into the bloodstream when those muscle cells shrink. Even the heart shrinks with aging. If the body is not equipped to handle that surfacing mercury efficiently through normal detoxification pathways, it will inflict more harm and intensify existing inflammation. Recirculating toxins may move into more critical areas like the brain and heart. As you can imagine, this will hasten the aging process.

DETERMINING YOUR PERSONAL BODY BURDEN

Different tests exist to help determine your individual body burden. You can, for instance, visit facilities that offer specialty testing to measure toxicity levels. These laboratories are usually CLIA certified by the Centers of Medicaid and Medicare Services, which regulate all laboratory testing performed on humans in the united States. They are dedicated to providing tests to health care providers, and typically analyze feces, hair, liver function, urine, and blood to arrive at a comprehensive conclusion. (For more specifics on these tests, see the list on pages 15-16.)

One such laboratory is doctor's data, Inc., based in Illinois. Offering a variety of tests to assess, detect, prevent, and even treat heavy metal burden, nutritional deficiencies, gastrointestinal function, and liver detoxification, doctor's data is a specialist and pioneer in essential and toxic elemental testing of multiple human tissues. Another very valuable service available to the

general public is direct testing, through companies such as LabSafe.com and Labtestingdirect.com. These companies offer a large variety of laboratory testing, including forty-one different tests for toxins. These tests can range in cost from $79 to $359. (Please note that I am not affiliated with any of these labs, but have used them in the past and at this writing trust them to be reliable. You'll find information on these labs, plus other resources including government agencies and health care facilities in the resource directory.) Why can't you ask your family doctor for help? Unfortunately, your own physician is limited in the kinds of tests he can perform on you. Customary blood and urine tests will not necessarily detect a given toxin that's doing damage to you but remains "invisible." Many of today's toxic chemicals can hide under the radar of standard medical testing.

Moreover, most doctors are trained to treat symptoms and may not be well versed in the area of toxins and how they affect human health (especially if your doctor received his education decades ago). And when they do search for clues to an illness's origins, they routinely look for traditional causes such as an invading bacteria or virus, or, in the case of liver cirrhosis, drinking too much alcohol. Few doctors will investigate another potential genesis that relates to toxins, chiefly because they don't have the resources or know-how to do so. Textbook cases of illnesses attributed to toxins don't have a strong voice or foothold yet in conventional medical circles. That "textbook" is currently being written by pioneering scientists and doctors studying this burgeoning field of environmental medicine. As the evidence mounts, however, we will likely (and hopefully) watch the medical industry evolve. Newly trained doctors will gain experience in identifying and diagnosing illnesses based on the perspective that toxins could be partly or principally to blame.

I highly respect and value the expertise of medical doctors, but they are limited in how they can help you evaluate your body burden. As noted before, however, I recommend that you consult with your physician as you embark on this program and share with him or her your experience (and your results, if you do choose to go to a specialty laboratory). As with any program that involves your health, you should make this a team effort with your family physician. You may even bring new insights to your doctor and add value and knowledge to his practice that can then be passed on to other patients.

Specialty testing definitely has its merits, but it is not usually necessary unless you are dealing with serious health issues. A simple questionnaire like the one below will give you some idea.

LABS THAT CONDUCT SPECIALTY TESTING TO DETERMINE AN INDIVIDUAL'S BODY BURDEN WILL OFTEN ANALYZE THE FOLLOWING:
Feces Many toxic metals, such as mercury, cadmium, lead, antimony, and uranium, are eliminated primarily through the stool and can be detected there. This can also include dietary exposure to metal toxins.

Hair Hair may be dead cells, but it holds many keys that are indicators of toxic loads. As protein is synthesized in the hair follicle, elements get incorporated permanently into the hair—both toxic elements such as aluminum, arsenic, lead, and mercury, as well as essential ones such as calcium, magnesium, and potassium. Scalp hair is easy to sample, and because it grows an average of one to two centimeters a month, it contains a chronological record of your body's metabolism of certain elements and exposure to toxic ones. Remember, not all elements found in hair are bad. Nutrient elements including magnesium, chromium, zinc, copper, and selenium are necessary cofactors for

hundreds of important enzymes and also are essential for the normal functions of vitamins. The levels of these elements in hair correlate to levels in organs and other tissues. Toxic elements, on the other hand, may be 200 to 300 times more highly concentrated in hair than in blood or urine. Therefore, hair is often the tissue of choice for detection of recent exposure to elements such as arsenic, aluminum, cadmium, lead, antimony, and mercury. The CDC acknowledges the value of hair mercury levels as a maternal and infant marker for exposure to neurotoxic methyl mercury from fish. One caveat, however, is that hair is vulnerable to external elemental contamination by means of certain shampoos, bleaches, dyes, and curing or straightening treatments. So a first step in the interpretation of a hair element report is to rule out sources of external contamination.

Liver The body continually attempts to eliminate chemical toxins in the liver. By-products of liver functions are key indicators of chemical exposure, liver damage, and the capability of the liver to eliminate toxins. Some of these by-products are enzymes that can be detected in urine. For example, elevated levels of D-glucaric acid in urine indicate exposure to toxins such as pesticides, fungicides, petrochemicals, drugs, toluene, formaldehyde, and styrenes.

Urine Analysis of elements in urine provides diagnostic information on potentially toxic elements—lead, mercury, cadmium, nickel, beryllium, arsenic, and aluminum can be detected in urine. It can also help determine whether your kidneys are able to retain health-sustaining elements such as magnesium, calcium, sodium, and potassium.

Blood Separate analyses can be done to red blood cells, whole blood, and serum respectively to help determine a variety of element loads. For example, analysis of red blood cells provides the best diagnostic tool for assessing the status of elements that have important functions inside cells or on blood cell membranes. This is useful for evaluating cardiac influences, anti-inflammatory processes, anemia, immunological function, glucose tolerance, and other disorders that are associated specifically with zinc deficiency. Whole blood analysis measures total levels of elements that circulate in both extracellular fluids (serum/plasma) and in cells (red blood cells and lymphocytes). Some elements are measured in serum because they are transported by serum proteins, or have important extracellular functions in blood. The combination of the whole-blood analysis and the serum analysis provides a comprehensive evaluation of the status of elements. Source: Doctor’s Data, Inc.

THE BODY BURDEN TEST

Instructions: Read each question, and then check the box if you answer “yes.”

- Do you brush your teeth daily?
- Do you have “silver” dental fillings?
- Have you ever had tooth extractions and/or root canal fillings?
- Do you use unfiltered tap water to brush your teeth, shower, make coffee or drink?
- Do you use commercial household cleaners, cosmetics or antiperspirants?
- Have you ever taken prescription medications or over-the-counter medications,including hormone replacement therapy or birth control?
- Do you have wall-to-wall carpet in your home or office?
- Do you eat commercial (non-organic) vegetables, fruits, or meat?
- Do you wear clothes that have been dry-cleaned?
- Do you wear synthetic materials (such as polyester)?
- Do you eat processed food or fast food?
- Have you ever smoked or been exposed to second-hand smoke?
- Do you eat in restaurants more than twice weekly?
- Do you use bug spray in your home or have a pest control service?
- Do you use weed killer on your lawn?
- Do you dye or bleach your hair?
- Do you use cologne or perfume?
- Are you overweight, underweight, or do you have cellulite deposits?
- Does your occupation expose you to toxins?
- Do you drink alcoholic beverages regularly?
- Do you eat fish more than twice a week?
- Do you regularly swim in a pool or lake?
- Do you live in a major metropolitan area?
- Do you live near an airport?
- Do you work in an environment using fluorescent lighting?
- Do you drink non-organic coffee?
- Do you feel tired, lethargic, or sluggish upon waking and even throughout the day?
- Do you have difficulty concentrating or have slow or surreal thinking?
- Do you feel depressed or have mood changes?
- Do you get more than one or two colds per year?
- Do you get postnasal drip, congestion, or a stuffy nose or sinuses upon waking or throughout the day?
- Do you have bad breath, a coated tongue, or a bitter or metallic taste in your mouth?
- Do you have strong body odor?
- Do you have strong-smelling urine?
- Do you have trouble sleeping or feel unrefreshed upon waking?
- Are your nails weak, soft, or brittle?
- Do you have dark circles under your eyes?
- Do you often feel stressed or anxious?
- Do you have allergies to various household products, dust, and molds?
- Do you have eczema, dry skin, acne, or rashes?
- Do you gain weight easily?
- Do you have food cravings, especially carbohydrate-rich foods and/or sweets?
- Do you have pain or discomfort on the right side of your stomach occasionally or after eating?

Are you constipated or do you have less than one bowel movement per day?

Do you have any of the following symptoms:

Sensitivity to perfume or other chemical odors
Persistent joint and/or muscle pain
Chronic infections
Depression
Fatigue
Headaches

The higher your score, the greater the potential toxic burden you may be carrying and the more you may benefit from a detoxification program. (If you scored below 10, you are not living on planet earth in the twenty-first century, you have fibbed on the test, or you are living a very sheltered life!)

If you scored higher than 25: You are a prime candidate for completing the entire detox program from start to finish, beginning with the total-body basic cleanse and moving through the optional liver and heavy metal cleanses (these will be described in full detail in Chapter 5). Don't rush the program, by trying to do both the basic cleanse and heavy metal cleanse, for example, at once. Follow the sequence as recommended. It's important to take a slow, gradual approach. This will help you avoid possible cleansing reactions.

Cleansing is the process of cleaning out and reducing the toxic load that currently resides in your body. Because so many toxins hide beyond the bloodstream, the mere action of cleansing brings them out of hiding and dumps them into the bloodstream. When that happens, you can then "reexperience" the effect of those toxins all over again before they are flushed from the body. A cleansing reaction, also known as a Herxheimer reaction or a healing crisis, is the temporary physical discomfort that may result if toxins are released faster than your body can get rid of them. This can cause such symptoms as fever, fatigue, diarrhea, cramps, headache, increased thirst, appetite loss, flulike conditions, skin eruption or irritations. These reactions are generally shortlived, often lasting just a day or two, and usually no longer than a week. (Drug addicts who go through targeted programs for their particular substance abuse typically experience this reaction, and have been known to feel their highs all over again as those toxins come out.) Symptoms may range from mild to severe, depending upon the rate of cleansing.

Because you likely carry a heavier load of toxins than those who score lower, you'll avoid fasting and focus on making healthier choices at your meal times. My detox diet ideas will teach you how to start shifting your diet toward a cleaner lifestyle. I'll be giving specific instructions in Chapter 5 about how you can reduce the dosage of your supplement regimen if you do experience too many negative side effects and need to slow down the program further. (This usually only occurs during the targeted cleanses, chiefly the cleanse for heavy metals.) You are not likely to experience cleansing reactions on this program, as my recommended formulas are gentle and designed for both beginners (people who've never done a detox program before) and those familiar with the practice.

If you scored below 25: Aim to complete the entire program as recommended. However, you may also choose to do the three-day fast. If you scored low, you can further benefit

by focusing on your diet more rigorously and cleaning out foods (and kicking out habits) that may have crept into your lifestyle. For example, if you've gotten into a habit of consuming sugary beverages and snacks in the late afternoon, you would do well to take notice of this and replace the habit with a nutritious juice blend or fiber bar. (Again, you'll find all the details and directions for creating a schedule for yourself in later chapters. I'll also be giving you plenty of ideas for meals and snacks that will help you fill your day with good nutrition and complement the detox process. Specific guidelines on how frequently you should be detoxing, and for how many days, will also be provided.)

CHAPTER 1 SUMMARY

- The Human Toxome Project was designed to illustrate the effects of exposure to industrial chemicals on the human body by testing the blood, urine, breast milk, and other tissues of selected participants.

- Studies have shown that toxic exposure begins in the womb, since the developing fetus is exposed to the toxins in its mother's blood through the placenta.

- A quick self-test can help you gauge your personal body burden.

- For those who want a full report on their body burden, specialty tests at various labs throughout the country can help determine your personal body burden. Unless you have a serious medical issue, you can simply answer a few questions to gauge your level of toxicity. This will then help you begin to focus on areas in your life and lifestyle that need to be cleaned up!

- Whether you score low or high on the body burden test, you can benefit by going through the detox program from start to finish. This program is designed for those who likely bear a lot of toxins and have never gone through a detoxification program before, as well as those who lead relatively healthy lives but want to focus on upping their health quotient even more.